REMARKS

Claims 1, 4, 5, 24, and 25 have been amended. Claims 1-25 remain pending. A Petition for Extension of Time (one-month) is being filed concurrently herewith. Applicants reserve the right to pursue the original claims and other claims in this and other applications. Applicants respectfully request reconsideration of the above-referenced application in light of the amendments and following remarks.

Claims 1-25 stand provisionally rejected under the non-statutory judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-23 of U.S. patent application no.: 10/082,286 ("the '286 application"). The rejection is respectfully traversed.

Claim 1 of the '286 application recites a semiconductor device comprising, *inter alia,* "a naviation system for storing design information such as *CAD* data." (emphasis added). Claim 1 of the present application, in contrast, now recites a semiconductor device comprising, *inter alia,* "a navigation system for storing design information such as *design* data." (emphasis added). One skilled in the art would understand that CAD data is *different* from design data. Claims 15, 17, and 18 depend from claim 1. Consequently, claims 1-25 of the present application are not, for the most part, contained and anticipated by claims 1-23 of the '286 application. The provisional non-statutory obviousness-type double patenting rejection should be withdrawn.

Claims 1, 8, 9, 11-18, 24, and 25 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No.: 6,363,167 ("Miyano") in view of U.S. Patent No.: 6,108,033 ("Ito"). The rejection is respectfully traversed.

The cited references, alone or in combination do not disclose or suggest the re-registering of data from the *design data* of a semiconductor wafer into a SEM image. The present invention performs updating of the template into one with the highest degree of matching, as Ito arguably does. However, the present invention *also* specifies the switching *between* different kinds of data, i.e., design data and SEM image data.

Miyano, in contrast, relates to a plurality of templates used for pattern-matching created from *CAD* data using lithography simulation. Upon the creation of the templates, the templates are then registered. As indicated above, Applicants' claimed invention *re-registers* data from the *design data* of a semiconductor wafer into a SEM image. Ito is relied upon for disclosing a template registering method.

Ito discloses that one of a plurality of templates that shows the highest degree of matching is used as a new template for updating purposes. Again, neither Miyano nor Ito disclose *re-registering* of data from the *design data* of a semiconductor wafer into a SEM image. Further, Ito does *not* disclose switching *between* different kinds of data, i.e., design data and SEM image data.

Moreover, Ito discloses a monitoring method and system using a television camera. Consequently, Ito's technical field is completely different from that of the present invention, and does not disclose or suggest at all about the application to a *semiconductor inspection system* as claimed.

Still further, there is no motivation to combine Miyano and Ito since the two references are in completely different fields. Ito relates to a providing a highly reliable video image monitoring method and system between a TV camera and an object (Col. 3, ll. 26-30). Miyano relates to a measuring method using a scanning electron microscope (Abstract). The problems associated with semiconductor manufacturing

and/or inspection are unique to manufacturing semiconductor devices using design data. As a result, one skilled in the art would not combine or examine the teachings of a reference dedicated to a TV camera, i.e., Ito, with the disclosures of a semiconductor inspection system, i.e., Miyano.

As a result, the cited references do not teach or suggest a semiconductor inspection system comprising, *inter alia*, "a navigation system for storing design information such as *design data* . . . wherein a portion of [an] image that corresponds to [a] template is *re-registered* as a new template in place of the bitmap based on the design information," as recited in claim 1 (emphasis added).

The cited references do not disclose or suggest a semiconductor inspection method where a template is registered in advance comprising, *inter alia*, "creating a template comprising a bitmap based on semiconductor chip design information such as design data . . . and *re-registering* an image portion corresponding to [a] detected position as a new template in place of [a] bitmap based on the design information," as recited in claim 24 (emphasis added).

Similarly, the cited references do not teach or suggest a semiconductor inspection comprising, *inter alia*, a "navigation system [which] sets the template comprising a bitmap based on semiconductor chip design such as design data . . . and *re-registers* as a template a portion of [a] image that is detected by [a] matching process and which corresponds to [a] template whereby the template is matched with a pattern within a grayscale image," as recited in claim 25 (emphasis added).

Claims 8, 9, 11-18 depend from claim 1 and should be similarly allowable along with claim 1 for at least the reasons provided above, and on their own merits.

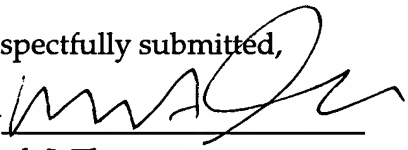
Claims 2-7, 10, and 19-23 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Miyano and Ito in view of U.S. Patent No.: 6,292,582 ("Lin"). The rejection is respectfully traversed.

Claims 2-7, 10, and 19-23 depend from claim 1 and should be similarly allowable along with claim 1 for at least the reasons provided above, and on their own merits. Specifically, Miyano and Ito do not disclose or suggest the re-registering of data from the *design data* of a semiconductor wafer into a SEM image, or that switching occurs *between* different kinds of data, i.e., design data and SEM image data. Moreover, there is no motivation to combine Miyano and Ito since one skilled in the art would not combine the teachings of a TV camera system, i.e., Ito, with the teachings of a semiconductor inspection system, i.e., Miyano.

In view of the above, each of the presently pending claims in this application is believed to be in immediate condition for allowance. Accordingly, the Examiner is respectfully requested to pass this application to issue.

Dated: August 8, 2005

Respectfully submitted,

By 

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